# CONSORT-EHEALTH (V 1.6.1) -Submission/Publication Form

The CONSORT-EHEALTH checklist is intended for authors of randomized trials evaluating web-based and Internet-based applications/interventions, including mobile interventions, electronic games (incl multiplayer games), social media, certain telehealth applications, and other interactive and/or networked electronic applications. Some of the items (e.g. all subitems under item 5 - description of the intervention) may also be applicable for other study designs.

The goal of the CONSORT EHEALTH checklist and guideline is to be

- a) a guide for reporting for authors of RCTs,
- b) to form a basis for appraisal of an ehealth trial (in terms of validity)

CONSORT-EHEALTH items/subitems are MANDATORY reporting items for studies published in the Journal of Medical Internet Research and other journals / scientific societies endorsing the checklist.

Items numbered 1., 2., 3., 4a., 4b etc are original CONSORT or CONSORT-NPT (nonpharmacologic treatment) items.

Items with Roman numerals (i., ii, iii, iv etc.) are CONSORT-EHEALTH extensions/clarifications.

As the CONSORT-EHEALTH checklist is still considered in a formative stage, we would ask that you also RATE ON A SCALE OF 1-5 how important/useful you feel each item is FOR THE PURPOSE OF THE CHECKLIST and reporting guideline (optional).

Mandatory reporting items are marked with a red \*.

In the textboxes, either copy & paste the relevant sections from your manuscript into this form - please include any quotes from your manuscript in QUOTATION MARKS, or answer directly by providing additional information not in the manuscript, or elaborating on why the item was not relevant for this study.

YOUR ANSWERS WILL BE PUBLISHED AS A SUPPLEMENTARY FILE TO YOUR PUBLICATION IN JMIR AND ARE CONSIDERED PART OF YOUR PUBLICATION (IF ACCEPTED). Please fill in these questions diligently. Information will not be copyedited, so please use proper spelling and grammar, use correct capitalization, and avoid abbreviations.

DO NOT FORGET TO SAVE AS PDF\_AND\_ CLICK THE SUBMIT BUTTON SO YOUR ANSWERS ARE IN OUR DATABASE !!!

Citation Suggestion (if you append the pdf as Appendix we suggest to cite this paper in the caption):

Eysenbach G, CONSORT-EHEALTH Group

CONSORT-EHEALTH: Improving and Standardizing Evaluation Reports of Web-based and

Mobile Health Interventions

J Med Internet Res 2011;13(4):e126 URL: http://www.jmir.org/2011/4/e126/

doi: 10.2196/jmir.1923 PMID: 22209829

\* Required

Your name \*

First Last

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Your e-mail address \*

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Title of your manuscript \*

Provide the (draft) title of your manuscript.

The ACT Out! Social Issue Theater Cluster Randomized Trial: Short-term Outcomes

# Name of your App/Software/Intervention \*

If there is a short and a long/alternate name, write the short name first and add the long name in brackets.

Act Out! Social Issue Theater

# **Evaluated Version (if any)**

e.g. "V1", "Release 2017-03-01", "Version 2.0.27913"

Your answer

## Language(s) \*

What language is the intervention/app in? If multiple languages are available, separate by comma (e.g. "English, French")

English

# URL of your Intervention Website or App

e.g. a direct link to the mobile app on app in appstore (itunes, Google Play), or URL of the website. If the intervention is a DVD or hardware, you can also link to an Amazon page.

https://www.claudemcnealproductions.com/act-out-ensemble/

URL of an image/screenshot (optional)

Your answer

Accessibility * Can an enduser access the intervention presently?
access is free and open
access only for special usergroups, not open
access is open to everyone, but requires payment/subscription/in-app purchases
app/intervention no longer accessible
Other:

# Primary Medical Indication/Disease/Condition \*

e.g. "Stress", "Diabetes", or define the target group in brackets after the condition, e.g. "Autism (Parents of children with)", "Alzheimers (Informal Caregivers of)"

Cyberbullying/bullying

# Primary Outcomes measured in trial \*

comma-separated list of primary outcomes reported in the trial

social-emotional competence, cyberbullying/b

## Secondary/other outcomes

Are there any other outcomes the intervention is expected to affect?

Intervention fidelity, viewer receptiveness, social-emotional competence subdomains

Recommended "Dose" *
What do the instructions for users say on how often the app should be used?
Approximately Daily
Approximately Weekly
Approximately Monthly
Approximately Yearly
as needed"
Other:
Approx. Percentage of Users (starters) still using the app as recommended after 3 months *
unknown / not evaluated
0-10%
O 11-20%
21-30%
31-40%
41-50%
51-60%
61-70%
71%-80%
81-90%
91-100%
Other: N/a - this intervention only occurs in clusters and as a point-in-time in

!

Overall, was the app/intervention effective? *
yes: all primary outcomes were significantly better in intervention group vs control
o partly: SOME primary outcomes were significantly better in intervention group vs control
on statistically significant difference between control and intervention
outcomes potentially harmful: control was significantly better than intervention in one or more
inconclusive: more research is needed
Other: Partly effective (cyberbullying), but results were very complex for a va
Article Preparation Status/Stage *
Article Preparation Status/Stage *  At which stage in your article preparation are you currently (at the time you fill in this form)
At which stage in your article preparation are you currently (at the time you fill in this form)
At which stage in your article preparation are you currently (at the time you fill in this form)  not submitted yet - in early draft status
At which stage in your article preparation are you currently (at the time you fill in this form)  not submitted yet - in early draft status  not submitted yet - in late draft status, just before submission
At which stage in your article preparation are you currently (at the time you fill in this form)  not submitted yet - in early draft status  not submitted yet - in late draft status, just before submission  submitted to a journal but not reviewed yet
At which stage in your article preparation are you currently (at the time you fill in this form)  not submitted yet - in early draft status  not submitted yet - in late draft status, just before submission  submitted to a journal but not reviewed yet  submitted to a journal and after receiving initial reviewer comments
At which stage in your article preparation are you currently (at the time you fill in this form)  ont submitted yet - in early draft status  not submitted yet - in late draft status, just before submission  submitted to a journal but not reviewed yet  submitted to a journal and after receiving initial reviewer comments  submitted to a journal and accepted, but not published yet

Journal *  If you already know where you will submit this paper (or if it is already submitted), please provide the journal name (if it is not JMIR, provide the journal name under "other")
onot submitted yet / unclear where I will submit this
Journal of Medical Internet Research (JMIR)
JMIR mHealth and UHealth
JMIR Serious Games
JMIR Mental Health
JMIR Public Health
JMIR Formative Research
Other JMIR sister journal
Other:
Is this a full powered effectiveness trial or a pilot/feasibility trial? *
O Pilot/feasibility
Fully powered
Manuscript tracking number *  If this is a JMIR submission, please provide the manuscript tracking number under "other" (The ms
tracking number can be found in the submission acknowledgement email, or when you login as author in JMIR. If the paper is already published in JMIR, then the ms tracking number is the four-digit number at the end of the DOI, to be found at the bottom of each published article in JMIR)
on ms number (yet) / not (yet) submitted to / published in JMIR
Other: 25860

# TITLE AND ABSTRACT

## 1a) TITLE: Identification as a randomized trial in the title

## 1a) Does your paper address CONSORT item 1a? \*

I.e does the title contain the phrase "Randomized Controlled Trial"? (if not, explain the reason under "other")

yes

Other:

## 1a-i) Identify the mode of delivery in the title

Identify the mode of delivery. Preferably use "web-based" and/or "mobile" and/or "electronic game" in the title. Avoid ambiguous terms like "online", "virtual", "interactive". Use "Internet-based" only if Intervention includes non-web-based Internet components (e.g. email), use "computer-based" or "electronic" only if offline products are used. Use "virtual" only in the context of "virtual reality" (3-D worlds). Use "online" only in the context of "online support groups". Complement or substitute product names with broader terms for the class of products (such as "mobile" or "smart phone" instead of "iphone"), especially if the application runs on different platforms.

1

subitem not at all important

essential

5

# Does your paper address subitem 1a-i? \*

Copy and paste relevant sections from manuscript title (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"The ACT Out! \*\*Social Issue Theater\*\* Cluster Randomized Trial: Short-term Outcomes"

on-web-based components o	or import	tant co-inte	erventions	in title, if	any (e.g., "	with telephone
	1	2	3	4	5	
m not at all important	0	0	0	0	0	essential
m not at all important	0	0	0	0	0	esser

indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Copy and paste relevant sections from manuscript title (include quotes in quotation marks "like this" to

Not applicable (though the outcome relates to cyberbullying, the intervention itself is fully offline)

# 1a-iii) Primary condition or target group in the title

Mention primary condition or target group in the title, if any (e.g., "for children with Type I Diabetes") Example: A Web-based and Mobile Intervention with Telephone Support for Children with Type I Diabetes: Randomized Controlled Trial

subitem not at all important essential

# Does your paper address subitem 1a-iii? \*

Copy and paste relevant sections from manuscript title (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

No, but it is in the first line of the abstract. I will edit if requested by journal.

# 1b) ABSTRACT: Structured summary of trial design, methods, results, and conclusions

NPT extension: Description of experimental treatment, comparator, care providers, centers, and blinding status.

# 1b-i) Key features/functionalities/components of the intervention and comparator in the METHODS section of the ABSTRACT

Mention key features/functionalities/components of the intervention and comparator in the abstract. If possible, also mention theories and principles used for designing the site. Keep in mind the needs of systematic reviewers and indexers by including important synonyms. (Note: Only report in the abstract what the main paper is reporting. If this information is missing from the main body of text, consider adding it)

subitem not at all important O O O o essential

## Does your paper address subitem 1b-i? \*

Copy and paste relevant sections from the manuscript abstract (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

The comparator was treatment as usual. The intervention is described as such in the Abstract: "This study assessed the effectiveness and implementation fidelity of the ACT Out! Social Issue Theater program, a one-hour psychodramatic intervention by professional actors; it also measured students' receptiveness to the intervention."

#### 1b-ii) Level of human involvement in the METHODS section of the ABSTRACT

Clarify the level of human involvement in the abstract, e.g., use phrases like "fully automated" vs. "therapist/nurse/care provider/physician-assisted" (mention number and expertise of providers involved, if any). (Note: Only report in the abstract what the main paper is reporting. If this information is missing from the main body of text, consider adding it)

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## Does your paper address subitem 1b-ii?

Copy and paste relevant sections from the manuscript abstract (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Not applicable (in-person intervention)

# 1b-iii) Open vs. closed, web-based (self-assessment) vs. face-to-face assessments in the METHODS section of the ABSTRACT

Mention how participants were recruited (online vs. offline), e.g., from an open access website or from a clinic or a closed online user group (closed usergroup trial), and clarify if this was a purely web-based trial, or there were face-to-face components (as part of the intervention or for assessment). Clearly say if outcomes were self-assessed through questionnaires (as common in web-based trials). Note: In traditional offline trials, an open trial (open-label trial) is a type of clinical trial in which both the researchers and participants know which treatment is being administered. To avoid confusion, use "blinded" or "unblinded" to indicated the level of blinding instead of "open", as "open" in web-based trials usually refers to "open access" (i.e. participants can self-enrol). (Note: Only report in the abstract what the main paper is reporting. If this information is missing from the main body of text, consider adding it)

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subitem not at all important O O O essential

## Does your paper address subitem 1b-iii?

Copy and paste relevant sections from the manuscript abstract (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Yes, via the following content in the Abstract: "This study was a two-arm cluster randomized control trial with 1:1 allocation that randomized at the classroom level (n = 76 classrooms in 12 schools across five counties in Indiana, comprised of n = 1,571 students at pretest in 4th, 7th, and 10th grades). The primary outcomes were self-reported social-emotional competence, bullying perpetration, and bullying victimization, and the secondary outcomes were receptiveness to the intervention, implementation fidelity (independent observer observation), and prespecified subanalyses of social-emotional competence for 7th and 10th grade students. All outcomes were collected at baseline and two-week posttest, with planned threemonth posttest data collection being prevented by the COVID-19 pandemic."

#### 1b-iv) RESULTS section in abstract must contain use data

Report number of participants enrolled/assessed in each group, the use/uptake of the intervention (e.g., attrition/adherence metrics, use over time, number of logins etc.), in addition to primary/secondary outcomes. (Note: Only report in the abstract what the main paper is reporting. If this information is missing from the main body of text, consider adding it)

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## Does your paper address subitem 1b-iv?

Copy and paste relevant sections from the manuscript abstract (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Partially not applicable - due to the type of trial, this was reported for the prior subitem. For other results: "Intervention fidelity was uniformly excellent (> 96% adherence), and students were highly receptive to the program. However, trial results did not support the hypothesis that the intervention would increase participants' social-emotional competence. The intervention's impact on bullying was complicated to interpret and included some evidence of small interaction effects (reduced cyberbullying victimization and increased physical bullying perpetration). However, there were also statistically and clinically significant reductions in physical, verbal, and relational bullying victimization in the full sample (pooled across both study arms). While not appropriate for causal attribution, the occurrence of these effects across 12 schools in different counties, with 76 classrooms, within a span of two weeks, by chance, was implausible, though we cannot state with certainty why these effects manifested."

#### 1b-v) CONCLUSIONS/DISCUSSION in abstract for negative trials

Conclusions/Discussions in abstract for negative trials: Discuss the primary outcome - if the trial is negative (primary outcome not changed), and the intervention was not used, discuss whether negative results are attributable to lack of uptake and discuss reasons. (Note: Only report in the abstract what the main paper is reporting. If this information is missing from the main body of text, consider adding it)

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subitem not at all important	0	0	0	0	0	essential

## Does your paper address subitem 1b-v?

Copy and paste relevant sections from the manuscript abstract (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

This was a mixed results trial, so conclusion suggests potentially why, and next steps: "We conceptually discuss several potential alternative explanations. As a next step, we encourage research into whether the ACT Out! intervention may engender a bystander effect not amenable to randomization by classroom. We therefore recommend a larger trial of the ACT Out! intervention that is focused specifically on cyberbullying, measures bystander behavior, is randomized by school, and is controlled for extant bullying prevention efforts at each school."

INTRODUCTION									
2a) In INTRODUCTION: Scientific background and explanation of rationale									
2a-i) Problem and the type of system/solution  Describe the problem and the type of system/solution that is object of the study: intended as stand-alone intervention vs. incorporated in broader health care program? Intended for a particular patient population? Goals of the intervention, e.g., being more cost-effective to other interventions, replace or complement other solutions? (Note: Details about the intervention are provided in "Methods" under 5)									
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subitem not at all important	0	0	0	0	0	essential			

Does your paper address subitem 2a-i? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Type of solution: "The premise behind the ACT Out! Social Issue Theater intervention, outlined in the trial protocol, is that dramatic performances can enable emotional catharsis, thereby allowing new ways of feeling and thinking about behaviors and attitudes."

The intervention is intended to reduce cyberbullying/bullying perpetration and victimization, and to affect social-emotional competence.

The rationale is: "Given the difficulty in addressing school-based bullying with lengthy and multipartite curricula, one might wonder why a short (one-hour) dramatic performance would be hypothesized to have even a short-term effect on SEC or bullying... ...ACT Out! Social Issue Theater is different than each of these examples because it uses trained, professional actors and requires no involvement from schools outside of planning the visit (when implemented outside of a study). We were unable to find a precedent for this intervention structure in the literature."

2a-ii) Scientific background, rationale: What is known about the (type of) system

Scientific background, rationale: What is known about the (type of) system that is the object of the study (be sure to discuss the use of similar systems for other conditions/diagnoses, if appropiate), motivation for the study, i.e. what are the reasons for and what is the context for this specific study, from which stakeholder viewpoint is the study performed, potential impact of findings [2]. Briefly justify the choice of the comparator.

	1	2	3	4	5	
subitem not at all important	0	0	0	0	0	essential

Does your paper address subitem 2a-ii? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

SEL: "There have been numerous SEL programs implemented and evaluated in schools in recent years; a summary of over 300 studies contained in four metaanalyses identified generally positive short-term outcomes [7] across multiple domains (e.g., substance use). In general, performances by the ACT Out! Ensemble are structured in such a way that they model aspects of SEL, such as healthy relationships, regardless of the additional topic being addressed (e.g., bullying)."

Bullying: "A recent meta-analysis of traditional bullying identified 65 school-based bullying prevention programs, but only eight had been evaluated more than once [13]. In general, such programs tend to be slightly more effective in reducing bullying perpetration and less effective in reducing victimization."

Psychodrama: "A small body of literature has examined psychodrama as a prevention or behavior change mechanism in youth, but these studies have covered diverse behaviors (e.g., [25]), have involved multiple separate components such as teacher training (e.g., [26]), and/or have used students or school employees rather than professional actors as dramatis personae (e.g., [27])"

Choice of comparator was justified in the published protocol paper.

2b) In INTRODUCTION: Specific objectives or hypotheses

## Does your paper address CONSORT subitem 2b? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"The present study primarily aimed to assess whether a one-hour exposure to ACT Out! Social Issue Theater was superior to treatment as usual (TAU) in developing SEC and reducing bullying (both bullying behavior and victimization) in elementary, middle, and high school students at two-week posttest. The study secondarily aimed to determine whether the same intervention was superior to TAU in developing specific sub-domains of SEC (social awareness, emotion regulation, relationship skills, and responsible decision making) among middle and high school students at two-week posttest. Finally, the study also aimed to assess student receptivity to ACT Out! Social Issue Theater using previously validated measures indicating student agreement with positive (e.g., "enjoyable") and negative (e.g., "boring") adjectives. Additional details are available in the trial protocol [2]."

#### **METHODS**

3a) Description of trial design (such as parallel, factorial) including allocation ratio

## Does your paper address CONSORT subitem 3a? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"The ACT Out! trial was a proof-of-concept cluster randomized superiority trial with two groups and 1:1 allocation. The unit of measurement was individual students, but the unit of randomization was the classroom, stratified by school (with one exception, see Attachment 1). For each school, half of the classrooms were randomly assigned to the intervention arm and half to the control arm. Schools with an odd number of classrooms had a single classroom randomly selected for exclusion (though if the school requested, that classroom was permitted to complete the survey for appearance's sake, and the results were then discarded by the study team). "

3b) Important changes to methods after trial commencement (such as eligibility criteria), with reasons

#### Does your paper address CONSORT subitem 3b? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

All deviations from the methods are documented either within the manuscript or in the attachment that documents smaller deviations.

## 3b-i) Bug fixes, Downtimes, Content Changes

Bug fixes, Downtimes, Content Changes: ehealth systems are often dynamic systems. A description of changes to methods therefore also includes important changes made on the intervention or comparator during the trial (e.g., major bug fixes or changes in the functionality or content) (5-iii) and other "unexpected events" that may have influenced study design such as staff changes, system failures/downtimes, etc. [2].

> 1 3 5

subitem not at all important

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## Does your paper address subitem 3b-i?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Not applicable.

# 4a) Eligibility criteria for participants

# Does your paper address CONSORT subitem 4a? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"The ACT Out! trial was conducted among 12 public and charter schools in Marion (n=4 schools), Ripley (n=3), Boone (n=2), Lawrence (n=2), and Monroe (n=1) Counties in Indiana. For reasons described in the protocol, clusters were selected only from grades four, seven, and ten [2]. All students in the selected classrooms and schools were eligible to participate... Schools were selected based on their willingness to participate in the project as described, which included classroomlevel randomization and inclusion of all eligible classrooms in the study's allocation processes."

4a-i) Computer / Internet literacy									
Computer / Internet literacy is often an implicit "de facto" eligibility criterion - this should be explicitly clarified.									
	1	2	3	4	5				
subitem not at all important	0	0	0	0	0	essential			
Does your paper address subitem 4a-i?  Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study  Not applicable.									
4a-ii) Open vs. closed, web-	based v	's. face-	to-face	assessr	nents:				
Open vs. closed, web-based vs. face-to-face assessments: Mention how participants were recruited (online vs. offline), e.g., from an open access website or from a clinic, and clarify if this was a purely web-based trial, or there were face-to-face components (as part of the intervention or for assessment), i.e., to what degree got the study team to know the participant. In online-only trials, clarify if participants were quasi-anonymous and whether having multiple identities was possible or whether technical or logistical measures (e.g., cookies, email confirmation, phone calls) were used to detect/prevent these.									
	1	2	3	4	5				
subitem not at all important	0	0	0	0	0	essential			

## Does your paper address subitem 4a-ii? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Once a school enrolled in the study, each classroom was provided with a study packet containing surveys and response forms, a manila envelope, a white envelope, and an administrator checklist (see supplements to [2]). Each classroom was also assigned a unique code consisting of the grade level, study arm, and a randomly generated cluster ID. This code was pre-filled on the back of each survey form as well as on the front of each envelope to facilitate data quality control.

Classroom teachers administered the surveys by following the step-by-step administrator checklist. Surveys that were handed out to students were placed back in the manila envelope, regardless of whether they were completed, while extra surveys were placed in the white envelope (unused). The pretest was completed between zero and three days prior to the intervention, depending on school schedules and availability. The posttest was completed between 14 and 27 days after the intervention, with most classrooms completing the posttest within 14 to 17 days, depending on school schedules and ability to facilitate the posttest."

#### 4a-iii) Information giving during recruitment

Information given during recruitment. Specify how participants were briefed for recruitment and in the informed consent procedures (e.g., publish the informed consent documentation as appendix, see also item X26), as this information may have an effect on user self-selection, user expectation and may also bias results.

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subitem not at all important	0	0	0	0	0	essential

## Does your paper address subitem 4a-iii?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

All documents provided during recruitment are published as Attachments to this study or as Attachments to the protocol paper.

## 4b) Settings and locations where the data were collected

## Does your paper address CONSORT subitem 4b? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

See responses within 4a.

## 4b-i) Report if outcomes were (self-)assessed through online questionnaires

Clearly report if outcomes were (self-)assessed through online questionnaires (as common in web-based trials) or otherwise.

subitem not at all important essential

## Does your paper address subitem 4b-i? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

See responses within 4a.

4b-ii) Report how institutional a	affiliations are	displayed
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Report how institutional affiliations are displayed to potential participants [on ehealth media], as affiliations with prestigious hospitals or universities may affect volunteer rates, use, and reactions with regards to an intervention. (Not a required item - describe only if this may bias results)

subitem not at all important

essential

# Does your paper address subitem 4b-ii?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Not applicable, except on the Informed Consent sheet.

5) The interventions for each group with sufficient details to allow replication, including how and when they were actually administered

# 5-i) Mention names, credential, affiliations of the developers, sponsors, and owners

Mention names, credential, affiliations of the developers, sponsors, and owners [6] (if authors/evaluators are owners or developer of the software, this needs to be declared in a "Conflict of interest" section or mentioned elsewhere in the manuscript).

subitem not at all important

essential

## Does your paper address subitem 5-i?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"The ACT Out Ensemble was founded in 1995 and is currently operated by Claude McNeal Productions (CMP), a professional theater troupe incorporated as a notfor-profit." This study was funded by a subaward from Claude McNeal Productions to produce an independent assessment of their program's efficacy (see Conflicts of Interest for extra steps taken to firewall).

## 5-ii) Describe the history/development process

Describe the history/development process of the application and previous formative evaluations (e.g., focus groups, usability testing), as these will have an impact on adoption/use rates and help with interpreting results.

subitem not at all important

essential

## Does your paper address subitem 5-ii?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Our decision to analyze this intervention was based not only on our a priori understanding of the value such a brief intervention might yield, but also on the remarkable community- and school-level support for the program. Prior to this study, more than 500,000 individuals had viewed a performance by the ACT Out! Ensemble [1], providing a notable depth of informal, qualitative evidence supporting the program. Uncontrolled evaluations of the program from 2015 also suggested substantive behavioral benefits [1]."

## 5-iii) Revisions and updating

Revisions and updating. Clearly mention the date and/or version number of the application/intervention (and comparator, if applicable) evaluated, or describe whether the intervention underwent major changes during the evaluation process, or whether the development and/or content was "frozen" during the trial. Describe dynamic components such as news feeds or changing content which may have an impact on the replicability of the intervention (for unexpected events see item 3b).

subitem not at all important

# essential

# Does your paper address subitem 5-iii?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Not applicable (e.g., content is described in the Attachments).

# 5-iv) Quality assurance methods

Provide information on quality assurance methods to ensure accuracy and quality of information provided [1], if applicable.

subitem not at all important essential

## Does your paper address subitem 5-iv?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Data were collected using a customized form created with Scantron Design Expert and scanned directly into a database with an Insight 700c scanner to avoid data entry errors. However, one of the survey matching elements required a handwritten response; these were typed manually into the database. To verify intervention fidelity, at least one individual who was not a member of the ACT Out! ensemble attended every performance and documented the concordance between a prespecified checklist of elements for the intervention and the performance itself. These checklists were developed separately for each grade (since the scenarios vary) and are available as Attachments 3 through 5. To establish coding reliability, a second individual attended performances for six clusters to conduct fidelity checks, and interrater reliability was computed (see Attachment 1)."

5-v) Ensure replicability by publishing the source code, and/or providing screenshots/screen-capture video, and/or providing flowcharts of the algorithms used

Ensure replicability by publishing the source code, and/or providing screenshots/screen-capture video, and/or providing flowcharts of the algorithms used. Replicability (i.e., other researchers should in principle be able to replicate the study) is a hallmark of scientific reporting.

5 subitem not at all important essential

## Does your paper address subitem 5-v?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

See Attachments. All data and analytic code are provided.

## 5-vi) Digital preservation

Digital preservation: Provide the URL of the application, but as the intervention is likely to change or disappear over the course of the years; also make sure the intervention is archived (Internet Archive, webcitation.org, and/or publishing the source code or screenshots/videos alongside the article). As pages behind login screens cannot be archived, consider creating demo pages which are accessible without login.

essential

subitem not at all important

# Does your paper address subitem 5-vi?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Not applicable.

## 5-vii) Access

Access: Describe how participants accessed the application, in what setting/context, if they had to pay (or were paid) or not, whether they had to be a member of specific group. If known, describe how participants obtained "access to the platform and Internet" [1]. To ensure access for editors/reviewers/readers, consider to provide a "backdoor" login account or demo mode for reviewers/readers to explore the application (also important for archiving purposes, see vi).

5

subitem not at all important essential

# Does your paper address subitem 5-vii? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Not applicable (not an online intervention).

5-viii) Mode of delivery, features/functionalities/components of the intervention and comparator, and the theoretical framework

Describe mode of delivery, features/functionalities/components of the intervention and comparator, and the theoretical framework [6] used to design them (instructional strategy [1], behaviour change techniques, persuasive features, etc., see e.g., [7, 8] for terminology). This includes an in-depth description of the content (including where it is coming from and who developed it) [1]," whether [and how] it is tailored to individual circumstances and allows users to track their progress and receive feedback" [6]. This also includes a description of communication delivery channels and - if computermediated communication is a component - whether communication was synchronous or asynchronous [6]. It also includes information on presentation strategies [1], including page design principles, average amount of text on pages, presence of hyperlinks to other resources, etc. [1].

	1	2	3	4	5	
subitem not at all important	0	0	0	0	0	essential

## Does your paper address subitem 5-viii? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"The intervention was a psychodramatic, improvisational performance that was delivered to classrooms (separately, except in one case where two small classrooms attended together) by members of the CMP professional theater company. Interventions were scheduled to last approximately one hour and were delivered during the school day. Each one-hour performance consisted of five vignettes focused on bullying and cyberbullying and was designed to be interactive, meaning that after each scenario, the student audience was invited to converse with the performers while they remained in character. In each case, a moderator from CMP also managed the overall performance (e.g., calling on students to ask questions of the characters). While the scenarios were improvisational in nature, they were designed to remain true to core concepts that were prespecified and agreed upon by CMP and the research team (e.g., the identity of the characters, the nature of the conflict, and methods of bullying). To ensure this, fidelity data were captured from all performances and are described in the Quality Control subsection. The written specifications for each vignette, by grade level, are provided as Attachment 2." Additional theoretical rationale is included in the Introduction.

## 5-ix) Describe use parameters

Describe use parameters (e.g., intended "doses" and optimal timing for use). Clarify what instructions or recommendations were given to the user, e.g., regarding timing, frequency, heaviness of use, if any, or was the intervention used ad libitum.

subitem not at all important essential

## Does your paper address subitem 5-ix?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Not applicable (not an online intervention).

# 5-x) Clarify the level of human involvement

Clarify the level of human involvement (care providers or health professionals, also technical assistance) in the e-intervention or as co-intervention (detail number and expertise of professionals involved, if any, as well as "type of assistance offered, the timing and frequency of the support, how it is initiated, and the medium by which the assistance is delivered". It may be necessary to distinguish between the level of human involvement required for the trial, and the level of human involvement required for a routine application outside of a RCT setting (discuss under item 21 - generalizability).

subitem not at all important essential

# Does your paper address subitem 5-x?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Not applicable (not an online intervention).

## 5-xi) Report any prompts/reminders used

Report any prompts/reminders used: Clarify if there were prompts (letters, emails, phone calls, SMS) to use the application, what triggered them, frequency etc. It may be necessary to distinguish between the level of prompts/reminders required for the trial, and the level of prompts/reminders for a routine application outside of a RCT setting (discuss under item 21 - generalizability).

5

subitem not at all important

essential

## Does your paper address subitem 5-xi? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Not applicable (not an online intervention).

# 5-xii) Describe any co-interventions (incl. training/support)

Describe any co-interventions (incl. training/support): Clearly state any interventions that are provided in addition to the targeted eHealth intervention, as ehealth intervention may not be designed as stand-alone intervention. This includes training sessions and support [1]. It may be necessary to distinguish between the level of training required for the trial, and the level of training for a routine application outside of a RCT setting (discuss under item 21 – generalizability.

subitem not at all important essential

# Does your paper address subitem 5-xii? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

No co-interventions occurred.

6a) Completely defined pre-specified primary and secondary outcome measures, including how and when they were assessed

## Does your paper address CONSORT subitem 6a? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"All measured outcomes were prespecified in the clinical trial registration as well as in the published protocol [2], along with rationale for their selection, and have been validated. Unfortunately, certain outcomes were not possible to collect due to the coronavirus 2019 (COVID-19) pandemic, which led to mandated school closures in the state during part of the data collection period (IDOE 2020) (see Attachment 1). However, we do not have reason to suspect that the data we collected prior to closures were substantively affected. Thus, this study collected the following outcomes:

## **Primary**

- Overall social-emotional competence was measured at baseline and at twoweek posttest using the Delaware Social-Emotional Competency Scale (DSECS-S)
- Bullying behavior and experiences of being bullied (victimization) were measured at baseline and at two-week posttest using the Bullying and Cyberbullying Scale for Adolescents (BCS-A)

## Secondary

- Student receptivity to the intervention was measured at two-week posttest (intervention arm only) using questions to assess the degree to which they found the intervention to be: enjoyable, interesting, a waste of time, boring, understandable, difficult to understand, believable, important, and helpful
- Social-emotional competence subdomains (social awareness, emotion regulation, relationship skills, and responsible decision making) were measured at baseline and two-week posttest (seventh and tenth grades only) using scales from the Washoe County School District Social-Emotional Competency Assessment

6a-i) Online questionnaires: describe if they were validated for online use and apply CHERRIES items to describe how the questionnaires were designed/deployed							
If outcomes were obtained through o and apply CHERRIES items to describ				-			
	1	2	3	4	5		
subitem not at all important	0	0	0	0	0	essential	
Does your paper address sul Copy and paste relevant sections from	m manuso	cript text					
Not applicable (not an online	interver	ntion).					
6a-ii) Describe whether and defined/measured/monitored		se" (incl	uding in	tensity (	of use/do	osage) was	
Describe whether and how "use" (inc (logins, logfile analysis, etc.). Use/ad reported in any ehealth trial.	_	-	_	•			
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6a-iii) Describe whether, how, and when qualitative feedback from participants was obtained

Describe whether, how, and when qualitative feedback from participants was obtained (e.g., through emails, feedback forms, interviews, focus groups).

subitem not at all important

essential

Does your paper address subitem 6a-iii?

Copy and paste relevant sections from manuscript text

No qualitative data were collected, though receptivity was measured as a secondary outcome.

6b) Any changes to trial outcomes after the trial commenced, with reasons

Does your paper address CONSORT subitem 6b? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

No changes to trial outcomes were made, except for outcomes not collected because schools shut down for COVID-19 before the final wave of data collection.

# 7a) How sample size was determined

NPT: When applicable, details of whether and how the clustering by care provides or centers was addressed

7a-i) Describe whether and how expected attrition was taken into account when calculating the sample size

Describe whether and how expected attrition was taken into account when calculating the sample size.

5

essential

subitem not at all important

## Does your paper address subitem 7a-i?

Copy and paste relevant sections from manuscript title (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"The rationale for choices made in preparing the sample size calculation is provided in the protocol [2]. We estimated the sample size required to detect a moderate effect (Cohen's d = 0.30), with two-sided significance of .05, and a power of .80 to be 340 participants. We estimated an intra-class correlation (ICC) of 0.153 based on a prior school-based cluster study on cigarette smoking with a similar methodology (as described in [2]), and assumed approximately 20 students per classroom, yielding a design effect of 3.907. We took the resultant estimate of 1,328 students and adjusted for an expected 20% loss due to survey matching procedures, producing the final sample size target of 1,594 students across approximately 80 classrooms."

7b) When applicable, explanation of any interim analyses and stopping guidelines

# Does your paper address CONSORT subitem 7b? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

We addressed the reason for lack of these in the protocol paper.

## 8a) Method used to generate the random allocation sequence

NPT: When applicable, how care providers were allocated to each trial group

## Does your paper address CONSORT subitem 8a? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Your answer

# 8b) Type of randomisation; details of any restriction (such as blocking and block size)

## Does your paper address CONSORT subitem 8b? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Simple randomization occurred at the cluster level using a smartphone app produced by Random.org [32]. Randomization of clusters occurred within schools with a 1:1 allocation. In the specific instance where clusters first had to be created (a single school), the website version of Random.org was used to randomly assign students to evenly sized clusters, and then to assign clusters to study arm."

9) Mechanism used to implement the random allocation sequence (such as sequentially numbered containers), describing any steps taken to conceal the sequence until interventions were assigned

## Does your paper address CONSORT subitem 9? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

- "Since generation of the allocation sequence was computerized, it was concealed to all members of the research team until the moment of assignment. Because of needs driven by school planning, there was some variability in the generation and assignment process. Decisions were made as follows:
- Schools that agreed to participate were asked to identify all clusters within the selected grade level (e.g., fourth, seventh, or tenth).
- If schools were willing and able to accommodate it, allocation sequences were generated by the fidelity checker immediately prior to the intervention (e.g., on-site, in the schools). However, most schools (10 of 12) were unable to accommodate this method.
- Subsequently, most schools were asked to list classrooms by a fixed characteristic (e.g., time the homeroom met, teacher's name) at the time of school enrollment. One of the researchers generated a random sequence, applied it directly to classrooms, and shared the sequence with school administrators, identifying which classrooms would be allocated to which arm, and asked the administrators not to share this information with teachers until necessary for planning efforts. "

10) Who generated the random allocation sequence, who enrolled participants, and who assigned participants to interventions

## Does your paper address CONSORT subitem 10? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

See prior response (item 9).

# 11a) If done, who was blinded after assignment to interventions (for example, participants, care providers, those assessing outcomes) and how

NPT: Whether or not administering co-interventions were blinded to group assignment

#### 11a-i) Specify who was blinded, and who wasn't

Specify who was blinded, and who wasn't. Usually, in web-based trials it is not possible to blind the participants [1, 3] (this should be clearly acknowledged), but it may be possible to blind outcome assessors, those doing data analysis or those administering co-interventions (if any).

subitem not at all important

# essential

#### Does your paper address subitem 11a-i? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Due to the nature of this study, blinding of participants, school officials, and researchers was not feasible. However, multiple independent statisticians were involved in conducting and reviewing analyses, and some were blinded to the meaning of study arm coding."

11a-ii) Discuss e.g., whether participants knew which intervention was the "intervention of interest" and which one was the "comparator"

Informed consent procedures (4a-ii) can create biases and certain expectations - discuss e.g., whether participants knew which intervention was the "intervention of interest" and which one was the "comparator".

subitem not at all important

essential

#### Does your paper address subitem 11a-ii?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

The comparator was treatment as usual.

#### 11b) If relevant, description of the similarity of interventions

(this item is usually not relevant for ehealth trials as it refers to similarity of a placebo or sham intervention to a active medication/intervention)

#### Does your paper address CONSORT subitem 11b? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Not applicable.

# 12a) Statistical methods used to compare groups for primary and secondary outcomes

NPT: When applicable, details of whether and how the clustering by care providers or centers was addressed

#### Does your paper address CONSORT subitem 12a? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"All outcomes were continuous, so linear mixed models (LMM) using restricted maximum likelihood (REML) were fitted for each analysis (SAS PROC MIXED) with repeated measures for each participant. Time of survey administration (pretest or posttest), study arm, and the interaction of time and study arm were treated as fixed effects. The interaction of time by study arm was the hypothesis test for causal effects (e.g., intervention group improved significantly more than the control group) All analyses allowed for clustering of students within schools and classrooms as random intercepts to alleviate the issue of inflated standard errors and used Kenward-Rogers degrees of freedom approximation to account for the cluster randomized trial design. P-values were two-sided and treated as significant at 0.05 or less; however, in keeping with recommendations from the American Statistical Society, we did not use p-values as the sole determinant of outcome importance. We instead provided the full dataset and analytic code, and interpreted the output based on a combination of effect size, clinical significance, standard errors, and significance [36]. Similarly, we produced four sets of output, the intention-to-treat (ITT) analysis, in which all data were analyzed in the arm to which they were randomized (with and without MI; 1,537 pretest and 1,209 posttest), and the per protocol (PP) analysis, in which only data resulting from a completed protocol were analyzed (with and without MI; 1,184 pretest and posttest), in accordance with reporting recommendations (e.g., [37]) (see Figure 1)"

#### 12a-i) Imputation techniques to deal with attrition / missing values

Imputation techniques to deal with attrition / missing values: Not all participants will use the intervention/comparator as intended and attrition is typically high in ehealth trials. Specify how participants who did not use the application or dropped out from the trial were treated in the statistical analysis (a complete case analysis is strongly discouraged, and simple imputation techniques such as LOCF may also be problematic [4]).

	1	2	3	4	5	
subitem not at all important	0	0	0	0	0	essential

#### Does your paper address subitem 12a-i? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Multiple imputation using the Markov Chain Monte Carlo (MCMC) approach was completed using SAS 9.4 (SAS Inc., Cary NC) using PROC MI and MIANALYZE with the assumption that data were missing at random (MAR). All variables that were collected were imputed for all analyses. Numbers of iterations were based on missingness in the per-protocol (PP) analysis, which had 1,184 pretests and posttests, and thus 2,368 surveys. Percent missingness ranged from a low of 1.22% to a high of 8.57%. SEC items not asked of 4th grade students were present on 2,078 surveys (removing 145 4th grade participants). Percent missingness within those variables ranged from 2.84% to 4.96%. Given this information, we selected 10 imputations for our analyses (integer greater than the missingness in the variable with the highest level of missingness, 10 > 8.57 [35]). Bias was also mitigated by presenting outcomes from four approaches (see Statistical Analysis)."

12b) Methods for additional analyses, such as subgroup analyses and adjusted analyses

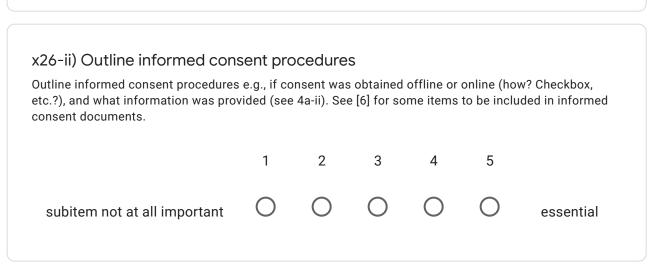
#### Does your paper address CONSORT subitem 12b? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Secondary outcomes were tested using the same mechanisms as primary outcomes.

X26) REB/IRB Approval and Ethical Considerations [recommended as subheading under "Methods"] (not a CONSORT item)

CONSORT-EHEALTH (V 1.6.1) - Submission/Publication Form							
X26-i) Comment on ethics committee approval							
	1	2	3	4	5		
subitem not at all important	0	0	0	0	0	essential	
Does your paper address subsections from the procedures of the pro	m the mar juscript), c explain wh s were a ocedure	nuscript (in or elaborat y the item approved s were c	e on this it is not app  d by the arried o	tem by problicable/rel Indiana ut accor	oviding add levant for y Universited	itional rour study ty Institutional he approved	



#### Does your paper address subitem X26-ii?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Authorizing officials for schools or school corporations were required to provide a signed letter of agreement prior to participating in the study. At the individual level, the project used a waiver of parental consent (opt out), as approved by the institutional review board (IRB). Parents and legal guardians were permitted to review study procedures and were provided with a description of the study a minimum of two weeks prior to any individual-level interaction with subjects, along with instructions for how to opt out; students, their parents, and their guardians all had the ability to opt a student out from participating either formally or by survey noncompletion. The rationale for this approach was a combination of the low risk posed by the study as well as the desire to avoid unintentional exclusion of underrepresented minorities and high-risk populations, as described in the protocol [2]."

#### X26-iii) Safety and security procedures

Safety and security procedures, incl. privacy considerations, and any steps taken to reduce the likelihood or detection of harm (e.g., education and training, availability of a hotline)

subitem not at all important essential

#### Does your paper address subitem X26-iii?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

No harm was anticipated from participation, but instructions, including participant rights, were printed on each survey instrument (see Attachments).

#### **RESULTS**

13a) For each group, the numbers of participants who were randomly assigned, received intended treatment, and were analysed for the primary outcome

NPT: The number of care providers or centers performing the intervention in each group and the number of patients treated by each care provider in each center

#### Does your paper address CONSORT subitem 13a? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Initially, a total of 13 schools from across Indiana participated in the trial, comprising 84 classrooms for the eligible grade levels. Of those classrooms, 42 were randomized to the intervention arm, and 42 were randomized to the control arm. One school did not follow protocol and failed to correctly administer pretest surveys to either arm prior to intervention delivery, so it was summarily removed from the trial (n = 4 classrooms). Three schools provided incorrect counts of classrooms to be randomized (n = 3 control, and n = 1 intervention classrooms), so sequences were generated that included classrooms that did not exist. On discovery of this discrepancy, sequences and assignments were not altered because it would have affected allocation concealment. Thus, despite 1:1 allocation, the number of baseline classrooms was 76 (n = 37 control, n = 39 intervention). Finally, an additional 11 classrooms (n = 5 control, and n = 6intervention) at a single school were slightly delayed in completing posttests, and then schools were shut down for the academic year due to COVID-19 prior to data collection. Thus, the classroom count completing posttests was 65 (n = 32 control, and n = 33 intervention). Table 1 shows the baseline characteristics of the two trial arms for all students who provided data, excluding blank surveys. "

13b) For each group, losses and exclusions after randomisation, together with reasons

Does your paper address CONSORT subitem 13b? (NOTE: Preferably, this is shown in a CONSORT flow diagram) \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Shown in CONSORT diagram.

#### 13b-i) Attrition diagram

Strongly recommended: An attrition diagram (e.g., proportion of participants still logging in or using the intervention/comparator in each group plotted over time, similar to a survival curve) or other figures or tables demonstrating usage/dose/engagement.

subitem not at all important

essential

# Does your paper address subitem 13b-i?

Copy and paste relevant sections from the manuscript or cite the figure number if applicable (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

CONSORT diagram indicates attrition.

14a) Dates defining the periods of recruitment and follow-up

#### Does your paper address CONSORT subitem 14a? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"The formal study start date was October 16, 2019, and interventions were delivered from November 6, 2019 to February 28th, 2020. School recruitment was terminated in February once the anticipated numbers of clusters and participants reached the planned total."

#### 14a-i) Indicate if critical "secular events" fell into the study period

Indicate if critical "secular events" fell into the study period, e.g., significant changes in Internet resources available or "changes in computer hardware or Internet delivery resources"

5

subitem not at all important

essential

#### Does your paper address subitem 14a-i?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

We note the substantial impact of COVID-19, which resulted in 11 lost classrooms for wave 2 data collection, and the complete elimination of wave 3 data collection.

14b) Why the trial ended or was stopped (early)

#### Does your paper address CONSORT subitem 14b? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Yes - COVID-19.

# 15) A table showing baseline demographic and clinical characteristics for each group

NPT: When applicable, a description of care providers (case volume, qualification, expertise, etc.) and centers (volume) in each group

#### Does your paper address CONSORT subitem 15? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Available as Table 1.

# 15-i) Report demographics associated with digital divide issues

In ehealth trials it is particularly important to report demographics associated with digital divide issues, such as age, education, gender, social-economic status, computer/Internet/ehealth literacy of the participants, if known.

subitem not at all important essential

#### Does your paper address subitem 15-i? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Not applicable.

16) For each group, number of participants (denominator) included in each analysis and whether the analysis was by original assigned groups

#### 16-i) Report multiple "denominators" and provide definitions

Report multiple "denominators" and provide definitions: Report N's (and effect sizes) "across a range of study participation [and use] thresholds" [1], e.g., N exposed, N consented, N used more than x times, N used more than y weeks, N participants "used" the intervention/comparator at specific pre-defined time points of interest (in absolute and relative numbers per group). Always clearly define "use" of the intervention.

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essential

subitem not at all important

#### Does your paper address subitem 16-i? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

See Tables 2 and 3.

#### 16-ii) Primary analysis should be intent-to-treat

Primary analysis should be intent-to-treat, secondary analyses could include comparing only "users", with the appropriate caveats that this is no longer a randomized sample (see 18-i).

subitem not at all important essential

#### Does your paper address subitem 16-ii?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Primary analysis was intent-to-treat but we consider and provide results from ITT (with and without MI) and per-protocol (with and without MI) to illustrate the range of outcomes - some borderline significance was observed (as the sample was smaller than planned due to COVID-19) and we felt this was the most transparent way to describe the outcomes.

17a) For each primary and secondary outcome, results for each group, and the estimated effect size and its precision (such as 95% confidence interval)

### Does your paper address CONSORT subitem 17a? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

See Tables 2 and 3 (we provide estimated means and standard errors, as well as pvalues for differences within arms and for the interaction).

# 17a-i) Presentation of process outcomes such as metrics of use and intensity of use

In addition to primary/secondary (clinical) outcomes, the presentation of process outcomes such as metrics of use and intensity of use (dose, exposure) and their operational definitions is critical. This does not only refer to metrics of attrition (13-b) (often a binary variable), but also to more continuous exposure metrics such as "average session length". These must be accompanied by a technical description how a metric like a "session" is defined (e.g., timeout after idle time) [1] (report under item 6a).

	1	2	3	4	5	
subitem not at all important	0	0	0	0	0	essential

Does your paper address subitem 17a-i?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Not applicable.

17b) For binary outcomes, presentation of both absolute and relative effect sizes is recommended

Does your paper address CONSORT subitem 17b? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Not applicable.

18) Results of any other analyses performed, including subgroup analyses and adjusted analyses, distinguishing pre-specified from exploratory

Does your paper address CONSORT subitem 18? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

No analyses were performed that were not pre-specified.

#### 18-i) Subgroup analysis of comparing only users

A subgroup analysis of comparing only users is not uncommon in ehealth trials, but if done, it must be stressed that this is a self-selected sample and no longer an unbiased sample from a randomized trial (see 16-iii).

subitem not at all important

essential

#### Does your paper address subitem 18-i?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

See our response above regarding ITT and per-protocol (because almost all attrition was due to COVID-19 in a "batch" and not for other reasons, we reported both analysis types).

#### 19) All important harms or unintended effects in each group

(for specific guidance see CONSORT for harms)

#### Does your paper address CONSORT subitem 19? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"There was also limited evidence of a small effect of similar magnitude for increased physical bullying perpetration via the interaction effects. The intervention arm perpetration score increases ranged from 0.06 (p = 0.013, interaction p = 0.060; ITT with MI) to 0.08 (p = 0.005, interaction p = 0.032; ITT without MI), corresponding to increased perpetration of 0.24 to 0.32 instances/2-weeks, though only the ITT without MI model showed significance, while the control arm did not have significant increases." However, we later report results indicating that, "overall physical victimization declined"

#### 19-i) Include privacy breaches, technical problems

Include privacy breaches, technical problems. This does not only include physical "harm" to participants, but also incidents such as perceived or real privacy breaches [1], technical problems, and other unexpected/unintended incidents. "Unintended effects" also includes unintended positive effects [2].

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subitem not at all important

essential

#### Does your paper address subitem 19-i?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Not applicable.

# 19-ii) Include qualitative feedback from participants or observations from staff/researchers

Include qualitative feedback from participants or observations from staff/researchers, if available, on strengths and shortcomings of the application, especially if they point to unintended/unexpected effects or uses. This includes (if available) reasons for why people did or did not use the application as intended by the developers.

subitem not at all important essential

# Does your paper address subitem 19-ii?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

We extensively describe our unexpected findings in the Discussion, and suggest appropriate next steps given a balanced interpretation of the findings in the Conclusion.

#### DISCUSSION

# 22) Interpretation consistent with results, balancing benefits and harms, and considering other relevant evidence

NPT: In addition, take into account the choice of the comparator, lack of or partial blinding, and unequal expertise of care providers or centers in each group

# 22-i) Restate study questions and summarize the answers suggested by the data, starting with primary outcomes and process outcomes (use)

Restate study questions and summarize the answers suggested by the data, starting with primary outcomes and process outcomes (use).

subitem not at all important

essential

#### Does your paper address subitem 22-i? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

The Discussion does this extensively, but the response is far too long due to nuances to include as a quote here.

# 22-ii) Highlight unanswered new questions, suggest future research

Highlight unanswered new questions, suggest future research.

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subitem not at all important essential

#### Does your paper address subitem 22-ii?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Given our post-hoc assessment of the intervention, a rigorous follow-up study with a new sample, addressing issues related to interpretability of bullying victimization data, including measures of possible bystander effects and randomization at the school level while - if feasible - controlling for ongoing and recent bullying prevention programs, would be valuable. In doing so, scenario emphasis might also reasonably be shifted more toward cyberbullying and away from physical bullying, for which potential iatrogenic effects in perpetration were computed in one of the models, though overall physical victimization declined. Additional data should also be collected on sustainability of the effects beyond two weeks (barring another event like the COVID-19 pandemic) as well as whether there is a dose-response relationship (e.g., would two performances within a semester more strongly reduce victimization?)...

On the practical side, given the high intervention fidelity and student receptiveness, and preliminary evidence related to cyberbullying victimization, it would not be unreasonable for CMP to offer a performance of scenarios focused on cyberbullying prevention, not as a replacement for extant bullying prevention programming, but as a supplement to it. In practice (e.g., outside of a trial) this intervention has comparatively low fiscal cost (so high scalability), only an hour of time is utilized, it requires no teacher time or preparation, and it may have some benefits. Cyberbullying victimization is indeed a "tough needle to move" and so we believe that further research into use of skilled psychodramatic performance in prevention programming is warranted."

20) Trial limitations, addressing sources of potential bias, imprecision, and, if relevant, multiplicity of analyses

20-i) Typica	I limitations	s in e	health	trials
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Typical limitations in ehealth trials: Participants in ehealth trials are rarely blinded. Ehealth trials often look at a multiplicity of outcomes, increasing risk for a Type I error. Discuss biases due to non-use of the intervention/usability issues, biases through informed consent procedures, unexpected events.

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essential

subitem not at all important

#### Does your paper address subitem 20-i? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Your answer

#### 21) Generalisability (external validity, applicability) of the trial findings

NPT: External validity of the trial findings according to the intervention, comparators, patients, and care providers or centers involved in the trial

#### 21-i) Generalizability to other populations

Generalizability to other populations: In particular, discuss generalizability to a general Internet population, outside of a RCT setting, and general patient population, including applicability of the study results for other organizations

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subitem not at all important essential

#### Does your paper address subitem 21-i?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"This study was truncated unexpectedly by the COVID-19 pandemic, which had the effect of preventing planned three-month outcome data collection and moderately affecting the number of clusters available for analysis for short-term outcomes (loss of 11 clusters). There were also several unplanned deviations from the study protocol, each of which has been documented in Attachment 1. Participating schools were from both urban and rural counties in Indiana, and student participants were generally more diverse than the population of Indiana, as a whole, but some caution should be used when generalizing these findings outside of the participating schools - especially since participating schools were those that volunteered to participate in a randomized trial. Further, given sample proportions, the results more readily can be generalized to middle and high school students than elementary school students. The study also had several notable strengths, including prespecification of all analyses, use of multiple objective external consultants to the research team, thorough documentation of all protocol deviations, use of validated measures, and provision of all student documents and data in an open-source format."

# 21-ii) Discuss if there were elements in the RCT that would be different in a routine application setting

Discuss if there were elements in the RCT that would be different in a routine application setting (e.g., prompts/reminders, more human involvement, training sessions or other co-interventions) and what impact the omission of these elements could have on use, adoption, or outcomes if the intervention is applied outside of a RCT setting.

	1	2	3	4	5	
subitem not at all important	0	0	0	0	0	essential

#### Does your paper address subitem 21-ii?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Not applicable - this was a practical RCT implemented in routine settings.

#### OTHER INFORMATION

#### 23) Registration number and name of trial registry

#### Does your paper address CONSORT subitem 23? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"This study was prospectively registered with Clinicaltrials.gov (NCT04097496)"

#### 24) Where the full trial protocol can be accessed, if available

#### Does your paper address CONSORT subitem 24? \*

Cite a Multimedia Appendix, other reference, or copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"The study protocol is available at https://doi.org/10.2196/17900."

# 25) Sources of funding and other support (such as supply of drugs), role of funders

#### Does your paper address CONSORT subitem 25? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Funding for this study was provided by Lilly Endowment Inc, grant no. 2019 0543, to Claude McNeal Productions. Funding was provided to Prevention Insights via a subaward from that grant."

#### X27) Conflicts of Interest (not a CONSORT item)

#### X27-i) State the relation of the study team towards the system being evaluated

In addition to the usual declaration of interests (financial or otherwise), also state the relation of the study team towards the system being evaluated, i.e., state if the authors/evaluators are distinct from or identical with the developers/sponsors of the intervention.

subitem not at all important essential

#### Does your paper address subitem X27-i?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Claude McNeal Productions and their representatives own the rights to the ACT Out! Social Issue Theater program. No one from that organization was involved in preparing the study protocol, interpreting findings, conducting analyses, or writing this manuscript - both as a matter of practice, and per written agreement in the subaward to Prevention Insights."

#### About the CONSORT EHEALTH checklist

As a result of using this checklist, did you make changes in your manuscript? *
yes, major changes
yes, minor changes
o no
What were the most important changes you made as a result of using this checklist?
N/A - the manuscript was written alongside a CONSORT checklist, but we just highlighted elements on a printed sheet when they were included.
How much time did you spend on going through the checklist INCLUDING making changes in your manuscript *
90 minutes
As a result of using this checklist, do you think your manuscript has improved? *
O yes
O no
Other: n/a

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